Number of Work/Study-Related Injuries

A total of 31 work/study related injury cases were recorded in 2008. Among the cases:

- 22 involved staff members
- 8 involved students
- 1 involved contractors

A comparison of accident numbers over the past 10 years is shown in Table 1 below.

Table 1. Comparison of Staff & Student Work/Study-Related Accident Numbers

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Accident Number</td>
<td>39</td>
<td>28</td>
<td>28</td>
<td>25</td>
<td>23</td>
<td>30</td>
<td>35</td>
<td>25</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Student Accident Number</td>
<td>8</td>
<td>8</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>

Lost Workdays

A total of 140 lost workdays of all staff injury cases were recorded by the end of 2008. The lost workdays incurred in one case was still counting in 2009. More than half of the total lost workdays (71 days) were contributed by 3 cases involving industrial and clerical staff performing "manual handling" tasks. The comparison of lost workdays over the past 10 years is shown in Table 2 below.

Table 2. Comparison of Lost Workdays

<table>
<thead>
<tr>
<th>Year</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Lost Workday</td>
<td>257.5</td>
<td>453</td>
<td>71.5</td>
<td>190</td>
<td>382.5</td>
<td>123.5</td>
<td>276</td>
<td>430</td>
<td>86</td>
<td>140</td>
</tr>
<tr>
<td>Average Lost Workday Per Accident</td>
<td>6.1</td>
<td>16.2</td>
<td>2.5</td>
<td>7.5</td>
<td>16.6</td>
<td>4.1</td>
<td>7.9</td>
<td>17.2</td>
<td>4.8</td>
<td>6.4</td>
</tr>
</tbody>
</table>

The severity of individual cases is analyzed and indicated by the number of lost workdays as shown in Table 3. Among the 22 staff injury cases, 5 cases did not incur any lost workdays, 4 cases incurred 3 or fewer lost workdays and 13 cases incurred more than 3 lost workdays. The largest number of lost workdays in one single case was 33 days (still counting in 2009). The case involved a clerical staff suffering from musculo-skeletal injury, allegedly caused in the course of performing a "manual handling" task.

Table 3. HKUST Staff Work Accidents in 2008 by Department

<table>
<thead>
<tr>
<th>Department</th>
<th>No. of Accidents</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
</tr>
<tr>
<td>BIOL</td>
<td>2</td>
</tr>
<tr>
<td>CBME</td>
<td>1</td>
</tr>
<tr>
<td>CHEM</td>
<td>1</td>
</tr>
<tr>
<td>CSO</td>
<td>1</td>
</tr>
<tr>
<td>DMSF</td>
<td>1</td>
</tr>
<tr>
<td>ENVF</td>
<td>1</td>
</tr>
<tr>
<td>FMO</td>
<td>5</td>
</tr>
<tr>
<td>SAO</td>
<td>9</td>
</tr>
<tr>
<td>VPAAO</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
</tr>
</tbody>
</table>

LWD = Lost Workday(s)

Causes of Work/Study-Related Injuries

Figure 1 summarizes the causes for all work/study-related injuries in 2008.

*Sharp Objects* remained as the top cause for work/study-related injuries in 2008, accounting for 30% (9 cases) of the total number.

Among the 9 cases caused by “sharp objects”, 5 belonged to staff members and 4 belonged to students.

*Manual handling* related injuries had increased to 5 cases in 2008 as compared with only 1 case in 2007. *Slip/trips* accidents had reduced to 3 cases from 5 cases in 2007.
Locations of Accidents

Of the 30 staff and students injury cases:
- 12 occurred in laboratories
- 6 occurred in staff/student quarters
- 5 occurred in common areas
- 3 occurred in sport facilities
- 2 occurred in office areas
- 1 occurred in workshops
- 1 occurred off campus

Common Root Causes of Accidents

Besides classifying causes of injuries in terms of physical sources and energies involved, investigation of the injury cases also revealed some common underlying root causes. These root causes are summarized in Figure 2 below.
Non-injury Incidents

A total of 6 non-injury incidents were recorded in 2008. Among them, 5 occurred in laboratories and 1 occurred in a workshop. The incidents included:

- 3 small fire incidents, 2 occurred in laboratories in the course of experiments and 1 in a workshop caused by overheated sawdust.
- 2 flooding incidents in laboratories.
- 1 chemical vapour release in a laboratory.

Summary of Significant Findings

1. There was an increase in number of staff injury cases, from 18 cases in 2007 to 22 cases in 2008. However, the figure in 2008 was still the second lowest in the past 10 years.
2. There were 8 student injury cases which were the same as the last two years.
3. The number of lost workdays in 2008 was 140 days, which was more than that of 2007 (86 days). More than 50% of the total lost workdays were contributed by 3 cases.
4. "Sharp Objects" was the top cause for work/study-related injuries in 2008, accounting for 30% (9 cases) of the total number (30 cases). Among the 9 cases, 5 involved staff and 4 involved students. 5 of the 9 injuries were caused by broken glassware. Most of these accidents were believed to be due to inadequate knowledge or skill of the staff and students in handling and working with glassware.
5. Manual handling tasks had caused the most workday lost in 2008. A total of 77 workdays lost in 5 such injury cases. The staff member in one of these cases was still on leave at the end of 2008 due to the injury.
6. The analysis of underlying root causes of the accidents indicates that work/operation-related training needs to be strengthened. For example, safe handling and working with glassware and needles is one of the major training focuses. As a significant portion of accidents was caused by "unsafe process or improper procedures", efforts in risk assessments for work processes should also be increased.
Dear Unit Heads,

It's time again for our annual fire drill! Upon discussions with the Fire Services Department (FSD) and after reviewing the University calendar, the fire drill has been scheduled for Wednesday, 22 April 2009. The drill will start at around 10:00 am. Similar to drills held in previous years, this will be a joint exercise between HKUST and the FSD. In addition to the evacuation exercise, there will also be a hazardous material spill response drill at the Photonics Technology Center. We will try to complete the evacuation exercise and enable re-entry to the building within 20 minutes.

We are now working with the FSD and concerned units of the University on detailed arrangements. We will update you further as necessary. In the meantime, please alert your colleagues of this event so that they can make appropriate arrangements for activities scheduled for that day. Please also take this opportunity to arrange for a review with your colleagues fire safety and evacuation procedures.

Please feel free to contact us (C M Li at ext. 6485 or T S Li at ext. 6511) if you have any query regarding this exercise.

Thank you for your help on this matter.

Joe Kwan  
Director of Health, Safety and Environment
The following are the purposes of the joint fire drill:

- Safe evacuation of people in a speedy and orderly manner can be achieved. Students, staff members, contractors and visitors can evacuate in a calm and orderly manner in accordance with the emergency procedures.

- The escape routes and designated assembly points are used in accordance with a predetermined plan.

- Departmental safety representatives (DSOs, Deputy DSOs and Fire Safety Ambassadors) who have designated responsibilities should carry out their tasks to ensure the safety of all concerned.

- To cultivate safety culture and to change people's attitude so that we will react rationally when we are confronted with a fire or other emergency on campus or elsewhere.

- To further enhance cooperation and communication between the HKUST and FSD.

The HKUST Emergency Response Team comprises of members from Facilities Management Office/Security Control Center and Health, Safety and Environment Office who will work together with Nanoelectronics Fabrication Facility, Photonics Technology Center and FSD to deal with the emergency situation as proposed in the fire drill scenario. Don't miss the opportunity to participate in this annual fire drill.
Man

Many laboratory operations require the use of compressed gases for analytical and instrument operations. Depending on the particular gas, there is a potential for simultaneous exposure to both mechanical and chemical hazards. Gases may be combustible, explosive, corrosive, poisonous, inert or a combination of hazards. Since gases are contained in heavy, highly pressurized metal containers, the large amount of potential energy resulting from compression of the gas makes the cylinder a potential rocket or fragmentation bomb.

**Purchasing Compressed Gas**

Whenever possible, researchers should purchase compressed gas through University Center of Laboratory Supplies (CLS). CLS maintains an inventory of many commonly used gases and has arrangement with a number of suppliers that will save researchers money when ordering gases that are not available from store.

Researchers should note that special permit and engineering controls may be required to install and use toxic, highly corrosive or other highly hazardous gases. Prior to ordering these gases, contact CLS or Health, Safety and Environment Office for an assessment.

**Safe Practices and Returning of Cylinders**

Careful procedures are necessary for handling the various compressed gases. Information about the installation, use of correct regulators and need for special piping system and engineering control can be found in the following two links.

1. A gas cylinder safety checklist can be found in our lab safety checklist:

   [http://www.ab.ust.hk/hseo/check_list/Inspection/Pressure_Cylinder/cylindg1.htm](http://www.ab.ust.hk/hseo/check_list/Inspection/Pressure_Cylinder/cylindg1.htm)

2. Further detailed information on gas cylinder safety can be found in our Safety and Environmental Protection Manual:

   [http://www.ab.ust.hk/hseo/sm06/ch5.htm#s7a](http://www.ab.ust.hk/hseo/sm06/ch5.htm#s7a)

It should be noted that CLS will attach a three-part tag when the cylinder is delivered in the laboratory. Researchers or technicians-in-charge are reminded to remove the appropriate section to correctly show the status of content. This tag is very useful for identifying content status and cylinder inventory.
Regular health check-ups can help find problems before they start. They can also help find problems early when your chances for treatment and cure are better. Which check-ups you need depends on your age, health, family history and lifestyle choices such as what you eat, how active you are, and whether you smoke.

To fully utilize the most of your next check-up, here are some things to do before you go:

- **Review your family health history**
  
  Are there any health problems or diseases that occurred in your close relatives, e.g. your parents? Or, are there any new conditions or diseases that have occurred in your close relatives? If so, let your doctor know. Family history might influence your risk of developing heart disease, stroke, diabetes or cancer. Your doctor will assess your risk of disease based on your family history and other factors and he/she may also recommend things you can do to help prevent disease, e.g. changing your diet or using screening tests to help detect disease early.

- **Find out if you are due for any general screenings**
  
  Have you had the recommended screening tests based on your age, health condition, family history and lifestyle? Check with your doctor to see if it’s time for any follow-up examinations or laboratory tests, etc. For example, Pap-smear test, mammogram, colon cancer screening, sexually transmitted disease screening, blood pressure check, etc.

- **Write down a list of issues and questions to take with you**

**Review any existing health problems and note any changes.**

- Have you noticed any body changes, including lumps or skin changes?
- Are you having pain, dizziness, fatigue, problems with urine or stool, or menstrual cycle changes?
- Have your eating habits changed?
- Are you experiencing depression, anxiety, trauma, distress or sleeping problems?
If so, note when the change begins, how it’s different from before, and any other observation that you think might be helpful.

Be honest with your doctor. Tell your doctor if you are not taking your medication as directed, exercising as much, etc. since you may be at risk for certain diseases or conditions because of how you live, work, etc. Your check-up plans would be developed partly based on what you tell your doctor. Your help of providing the most up-to-date and accurate information would bring you the best guidance from the doctor.

(This article is written by Health Concepts Ltd, the HKUST's medical clinic operator.)